

What is Claimed is:

1. A compress and position apparatus adapted for pressing a substrate, comprising:

5 a guiding column having a first end and a second end corresponding to the first end, the diameter of the second end being greater than the diameter of the first end;

10 a base positioned under the second end of the guiding column and having a cylinder in the center thereof, the base further having a first plane arranged thereon at least one locating pin and a corresponding second plane having a convex portion arranged at the center thereof;

 a housing having a plane on lateral surface thereof and mounted on the first plane, for disposing therein the guiding column and the cylinder;

15 a seat having a cavity on the center thereof, in which the housing and the guiding column being disposed, the first end being connected to the seat and a plane being defined on the inner wall of the cavity;

 a annular portion disposed on the first plane, having a through hole arranged at the center thereof for the housing to pass through and at least one locating hole corresponding to the locating pin;

20 a pressing plate disposed beneath the annular portion.

2. The compress and position apparatus of claim 1, wherein the substrate is a silicon wafer.

3. The compress and position apparatus of claim 1, wherein the second end has a groove for receiving an elastic element.

25 4. The compress and position apparatus of claim 3, wherein the elastic element comprises an O-ring made of rubber.

5. The compress and position apparatus of claim 1, wherein the convex portion is separated from the pressing plate by a predetermined distance for enabling the locating pin to escape from the locating hole.

6. The compress and position apparatus of claim 1, wherein the cylinder has a groove for receiving an elastic element.

7. The compress and position apparatus of claim 6, wherein the elastic element comprises an O-ring made of rubber.

5 8. The compress and position apparatus of claim 1, wherein the plane on the housing abuts the plane on the seat.

9. The compress and position apparatus of claim 1, wherein the housing has a central opening for the first end to pass through and a plurality of vents all defined on the top thereof and a plurality of apertures defined on
10 the inner wall thereof, such that the vents and the apertures are connected.

10. The compress and position apparatus of claim 9, wherein the vents comprise a first vent and a second vent and the apertures comprise a first aperture connected to the first vent and a second aperture connected to the second aperture.

15 11. The compress and position apparatus of claim 9, wherein a groove is defined on the periphery of the opening for receiving an elastic element.

12. The compress and position apparatus of claim 11, wherein the elastic element comprises an O-ring made of rubber.

20 13. The compress and position apparatus of claim 1, wherein the compress and position apparatus is made of plastic.

14. The compress and position apparatus of claim 1, wherein the second end is not able to cover the apertures when the housing moves up and down along the guiding column.